

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P881876

Luminaire Tested: **NAV-SB1C-727-U-T2-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P881876
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1C-727-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4960 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G1

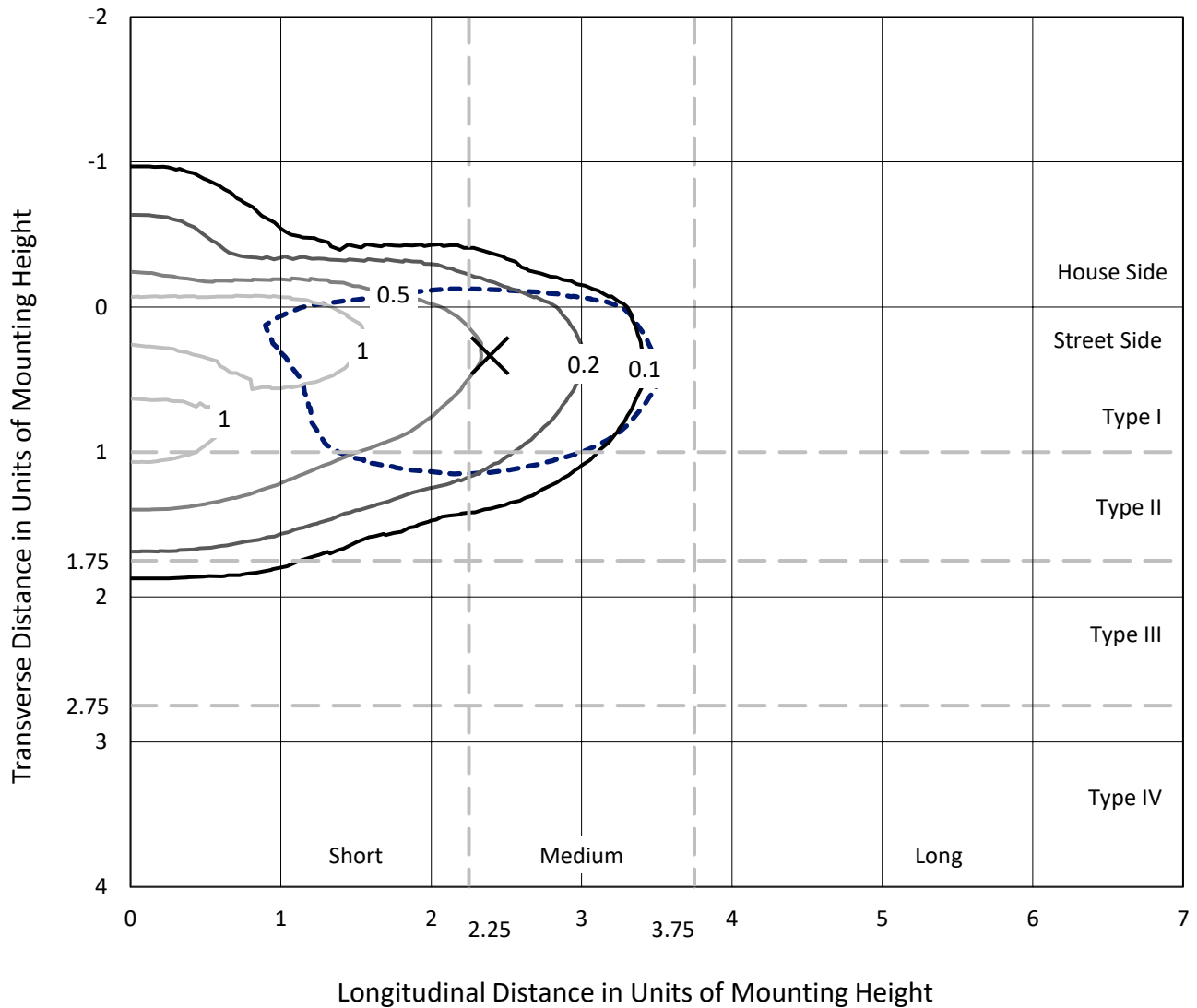
Input Watts (W): 54.4
Input Voltage (V): 120.0
Input Current (Ain): 0.437
Voltage Rise (V): NR
Power Factor: 0.993
Total Harmonic Distortion (THDi): 9.314
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

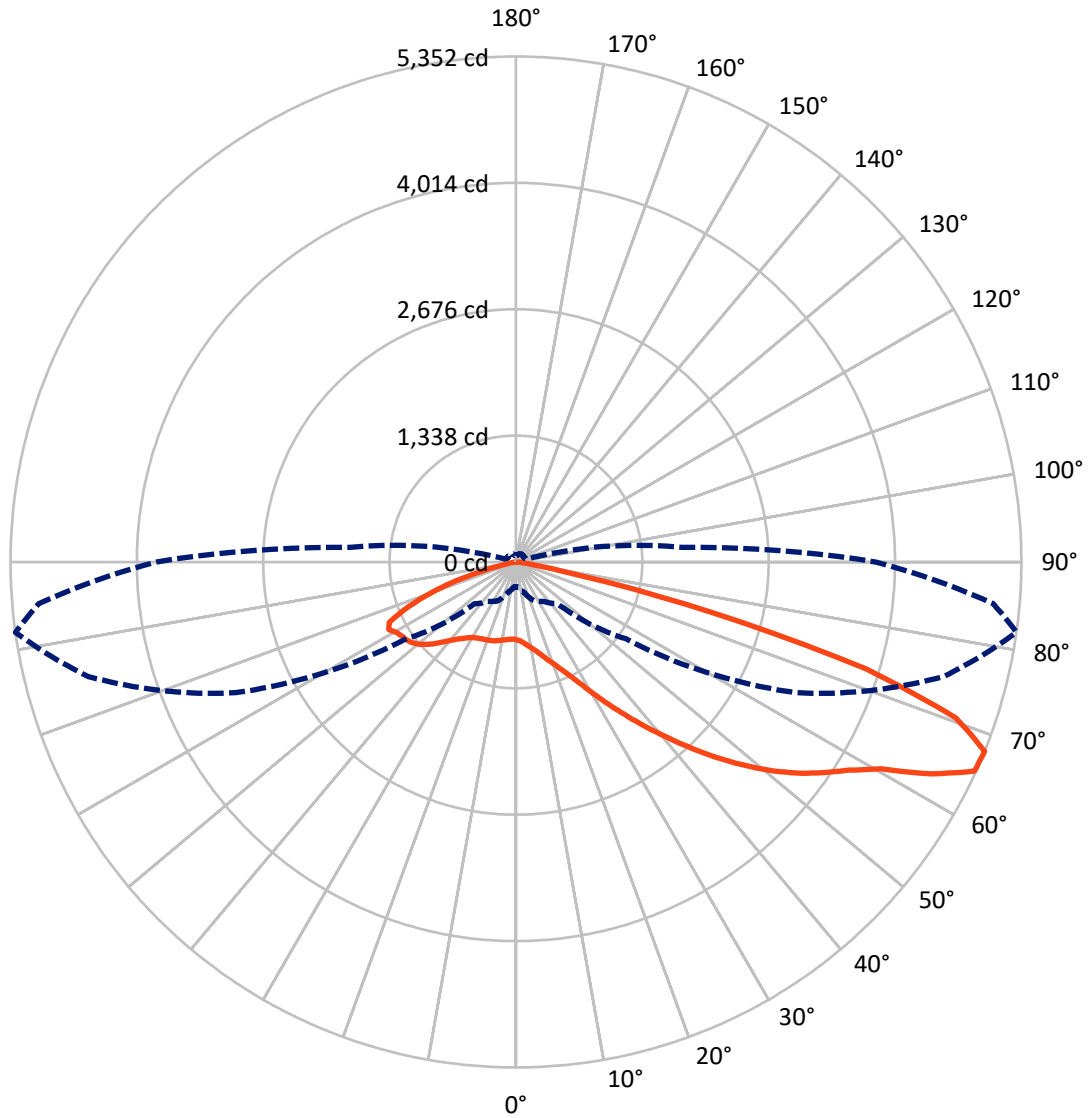
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 82-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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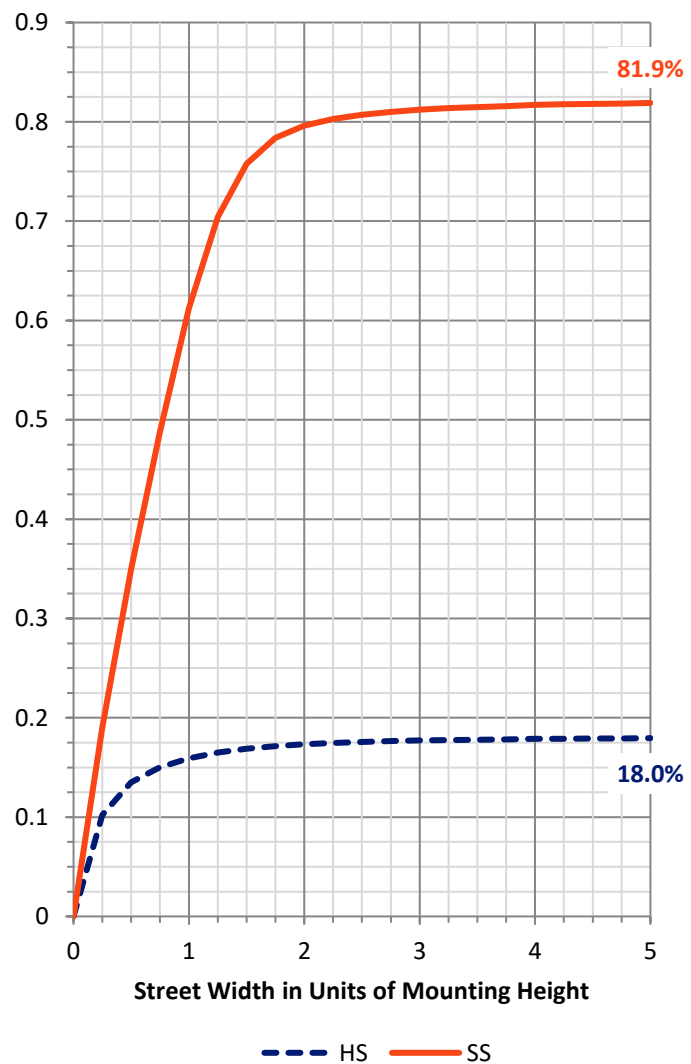
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	898.5	0.0	898.5
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	4061.5	0.0	4061.5
	% Fixture	81.9	0.0	81.9
Total	Lumens	4960.0	0.0	4960.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.2	1.5
10°-20°	190.2	3.8
20°-30°	304.7	6.1
30°-40°	538.8	10.9
40°-50°	944.0	19.0
50°-60°	1259.1	25.4
60°-70°	1172.1	23.6
70°-80°	449.9	9.1
80°-90°	27.9	0.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4960.0	100.0
0°-180°	4960.0	100.0

Coefficient of Utilization



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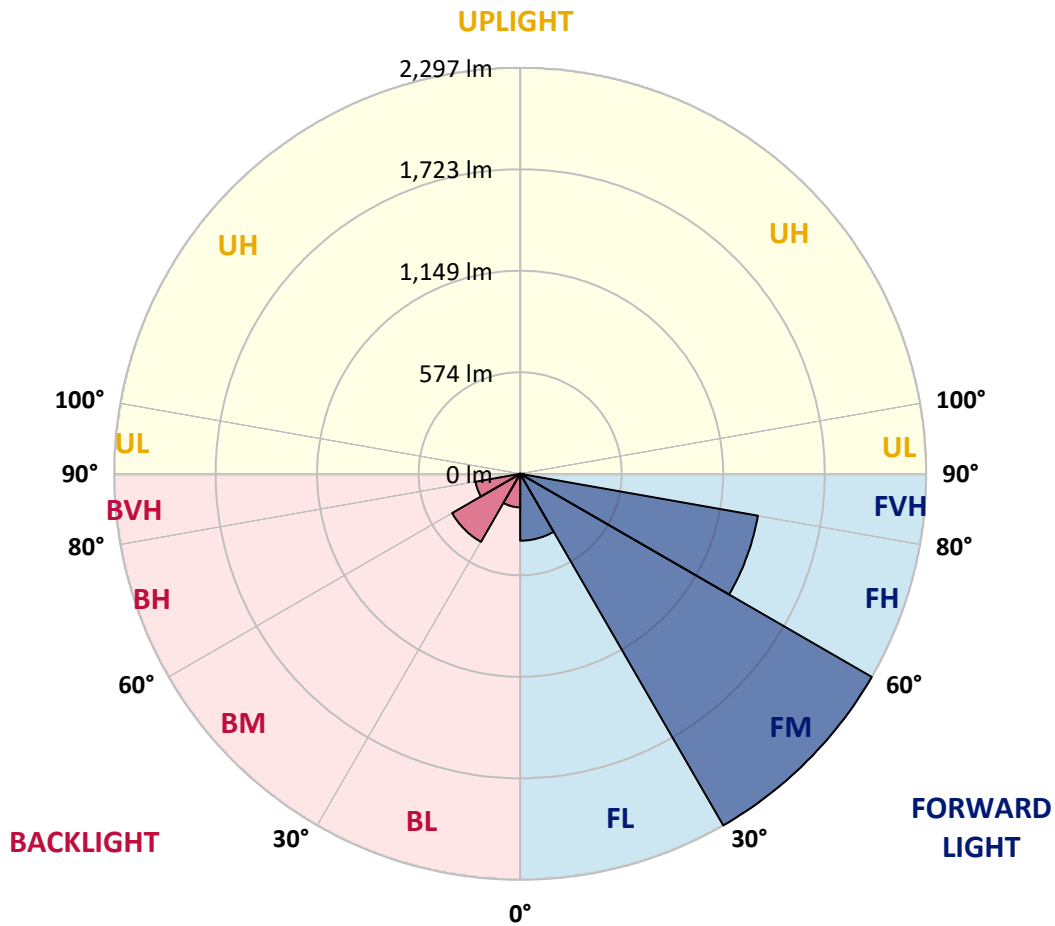
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	378.4	7.6			
FM (30°-60°)	2297.3	46.3			
FH (60°-80°)	1365.6	27.5			G1/1800
FVH (80°-90°)	20.3	0.4			G1/100
BL (0°-30°)	189.8	3.8	B1/500		
BM (30°-60°)	444.6	9.0	B1/1000		
BH (60°-80°)	256.4	5.2	B1/500		G1/500
BVH (80°-90°)	7.6	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	821.7	821.7	821.7	821.7	821.7	821.7	821.7	821.7	821.7	821.7	821.7
2.5°	868.5	873.5	870.6	869.2	866.7	863.1	860.3	851.3	842.1	836.0	833.8
5°	886.0	891.0	890.6	892.1	893.8	894.9	894.2	884.2	871.0	860.6	854.6
7.5°	871.0	876.7	881.3	888.5	901.0	914.2	920.6	918.5	904.9	890.6	883.1
10°	828.5	834.6	845.6	862.4	888.8	917.4	941.3	952.4	943.8	928.1	917.8
12.5°	750.6	756.7	778.5	814.9	859.2	908.8	954.5	984.2	986.3	970.6	958.5
15°	663.1	669.2	692.4	738.1	805.6	885.3	961.7	1017.8	1036.7	1023.1	1008.5
17.5°	608.9	614.2	631.7	668.5	738.9	838.1	959.2	1053.5	1096.7	1086.0	1068.5
20°	592.4	597.1	605.3	631.0	689.6	789.2	942.8	1087.0	1161.3	1155.2	1135.6
22.5°	609.9	614.2	616.7	628.2	664.9	757.1	922.1	1121.3	1236.3	1237.0	1213.1
25°	650.3	654.6	651.7	658.9	674.9	747.1	914.2	1161.7	1330.6	1338.4	1311.3
27.5°	716.7	717.1	710.3	709.9	712.4	762.1	922.4	1204.9	1449.5	1464.1	1430.6
30°	849.9	844.6	818.5	790.3	777.4	807.1	945.3	1255.9	1589.8	1615.9	1573.8
32.5°	1055.3	1047.4	999.5	932.1	864.2	879.6	986.3	1314.2	1742.7	1789.8	1738.4
35°	1278.1	1275.9	1225.9	1125.6	1007.0	982.8	1053.1	1390.6	1909.5	1984.4	1923.4
37.5°	1485.2	1484.1	1455.6	1337.4	1193.1	1126.7	1160.2	1490.6	2088.0	2196.6	2124.4
40°	1674.5	1677.7	1649.1	1543.4	1398.1	1311.3	1305.9	1614.1	2286.6	2427.6	2341.9
42.5°	1838.0	1841.6	1812.7	1734.5	1600.6	1515.6	1484.9	1765.5	2480.5	2675.8	2574.4
45°	1949.1	1971.2	1966.9	1904.5	1808.4	1720.2	1699.8	1955.5	2701.5	2939.0	2820.1
47.5°	1980.5	2000.9	2033.0	2041.6	1983.0	1896.2	1920.5	2184.4	2925.1	3202.5	3067.2
50°	1903.0	1922.0	1988.7	2077.7	2118.4	2091.6	2135.1	2429.8	3154.0	3465.4	3309.7
52.5°	1750.2	1769.5	1853.7	1994.4	2160.5	2244.8	2350.5	2671.5	3375.7	3714.3	3539.3
55°	1529.1	1549.5	1657.7	1817.0	2080.2	2308.0	2530.1	2912.9	3578.9	3938.2	3746.4
57.5°	1228.4	1243.4	1355.9	1578.8	1878.0	2245.1	2662.6	3176.5	3770.3	4158.2	3951.8
60°	800.6	813.8	944.5	1193.1	1543.1	2035.2	2689.0	3470.4	4024.6	4444.2	4228.5
62.5°	532.4	541.4	618.9	801.3	1086.7	1632.0	2534.4	3705.0	4397.4	4942.0	4703.1
65°	365.3	374.2	451.7	578.9	702.1	1079.5	2089.8	3673.9	4735.2	5337.3	5054.9
67.5°	260.7	268.2	333.9	453.9	508.2	627.1	1416.6	3276.8	4686.7	5352.3	5073.8
70°	186.8	191.1	245.3	353.5	403.9	376.7	787.8	2506.2	4103.5	4942.4	4687.4
72.5°	130.7	132.1	170.3	269.3	325.3	275.0	375.0	1670.9	3103.6	3879.3	3633.9
75°	88.6	90.3	114.6	197.5	261.0	210.0	198.6	896.0	1822.0	2147.3	1924.8
77.5°	54.3	55.0	73.9	135.0	195.3	160.0	127.8	379.6	704.9	692.1	589.9
80°	30.7	30.7	47.1	83.9	133.2	103.2	89.6	161.4	223.2	196.1	172.8
82.5°	17.1	17.5	34.3	52.1	88.2	61.1	49.3	74.6	96.4	85.3	74.3
85°	7.1	7.9	21.1	24.6	42.1	30.4	20.0	31.4	35.7	31.8	23.2
87.5°	0.7	1.1	6.4	4.6	5.0	6.1	2.9	6.1	5.0	5.0	3.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	821.7	821.7	821.7	821.7	821.7	821.7	821.7	821.7	821.7	821.7	821.7
2.5°	827.1	821.7	808.1	792.4	771.7	761.7	748.1	738.9	731.0	731.7	724.6
5°	843.1	829.6	799.2	761.4	714.2	680.6	644.9	620.3	600.3	596.0	586.4
7.5°	865.3	843.8	790.6	722.4	642.8	582.4	528.5	493.9	469.2	461.4	453.5
10°	893.8	862.8	779.6	673.5	558.9	482.1	424.2	397.1	380.3	374.6	370.3
12.5°	927.1	884.6	764.9	613.9	472.5	398.5	361.7	348.2	342.8	341.0	340.0
15°	968.8	911.7	742.8	543.2	399.2	347.5	331.8	330.0	330.7	330.0	329.6
17.5°	1018.5	941.3	706.7	470.3	350.0	321.4	315.7	317.1	318.9	318.5	317.8
20°	1072.8	970.6	660.6	405.7	316.4	302.8	299.6	301.0	302.5	301.8	301.4
22.5°	1134.5	1002.0	609.6	355.3	293.9	285.7	282.1	282.5	282.5	281.0	280.3
25°	1208.5	1036.7	556.0	319.6	276.8	270.3	266.0	264.6	262.5	258.2	257.5
27.5°	1296.7	1073.5	504.6	294.6	263.2	257.1	252.1	248.5	243.2	236.0	235.3
30°	1395.9	1118.1	461.0	278.9	252.5	246.4	240.7	235.3	227.5	218.5	217.8
32.5°	1512.7	1166.0	429.2	268.5	242.8	236.4	229.6	223.2	214.6	205.7	206.1
35°	1652.0	1223.8	410.7	261.4	235.3	226.8	219.3	212.1	205.7	197.8	197.1
37.5°	1803.0	1285.2	405.0	257.8	230.3	217.1	208.6	203.6	202.8	198.2	197.8
40°	1968.4	1358.1	409.2	255.7	225.0	207.8	198.6	197.5	199.3	191.1	191.4
42.5°	2143.4	1444.5	416.4	253.2	217.5	198.6	189.6	189.6	188.2	176.8	176.8
45°	2332.6	1544.1	423.5	247.1	208.6	189.3	182.5	180.0	173.9	162.8	162.5
47.5°	2523.3	1645.6	428.9	236.0	197.8	181.4	175.3	169.6	160.7	150.7	150.3
50°	2704.4	1736.6	423.2	219.6	185.7	173.9	167.5	159.6	150.0	143.2	142.1
52.5°	2866.1	1815.5	398.9	200.3	172.8	166.1	160.3	152.1	144.3	137.1	136.4
55°	3006.8	1879.5	356.0	182.1	161.4	159.3	153.6	143.2	132.5	126.4	125.7
57.5°	3141.8	1928.0	302.5	167.1	151.1	151.8	143.2	133.9	123.9	117.5	116.8
60°	3321.5	1993.0	248.2	153.2	140.0	142.1	132.8	126.1	113.6	105.3	104.3
62.5°	3608.6	2094.1	197.1	136.1	127.1	127.8	123.9	115.7	100.7	91.1	90.3
65°	3836.4	2056.9	155.3	117.5	112.5	113.6	113.6	104.6	88.6	77.5	76.4
67.5°	3810.7	1761.3	123.9	99.3	98.6	99.3	101.8	94.3	78.6	69.6	68.2
70°	3510.4	1400.9	99.3	82.5	85.7	83.9	91.1	86.1	70.7	61.8	60.7
72.5°	2864.4	1009.2	75.7	68.2	65.7	68.6	82.1	77.5	58.9	48.9	47.9
75°	1673.8	538.5	56.4	53.9	47.5	57.1	72.8	66.1	45.0	36.1	35.0
77.5°	544.9	187.8	41.4	39.6	35.4	46.1	62.1	55.7	36.8	28.6	27.5
80°	146.1	56.8	28.2	26.1	22.9	34.3	49.3	44.3	26.4	18.6	18.2
82.5°	58.6	23.9	16.4	14.6	12.5	23.6	38.9	35.7	19.6	11.8	11.8
85°	18.9	7.9	6.1	4.6	5.7	14.6	23.2	24.3	13.9	6.1	4.6
87.5°	2.5	1.1	1.1	1.4	1.1	2.5	7.1	6.8	3.9	0.7	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)